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VINOVSAYA, G. A.																																																																																																									
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Nitrided steel as a substitute for nonferrous metals V. S. Chernyak and G. A. Azimovskaya. <i>Yuzhnik Metallo-</i> <i>prom.</i> 20, No. 11-12, 12-34 (1940). — The following method is suggested for prep. nitrided steel which can replace many gas-welded nonferrous parts. Immerse the soft steel parts in benzene for 5 min., wash with cold water, degrease for 30 min. in 8% NaOH contg. water glass, (4 g. water glass and 80 g. NaOH per l. of water) at 80-100°C, wash with hot water and treat with 15% H₂SO₄ (1.065) for 15 min. at 60°. For each l. of acid soln. add 5 g. of the perpet. "K₂" (not identified). Wash in cold water, neu- tralize in 5% soda soln., wash with cold water, passivate by dipping for 5 min. in 0.5% K₂Cr₂O₇, wash with hot water and dry with warm air. Those parts which are to have good surface may now be polished. Place the parts in the furnace and nitride for 30-60 min. with NH₃ dis- solved to the extent of 30-40%. Those parts which are to operate in atm. conditions are nitrided at 350-370° and those which are to come in contact with O₂ are nitrided at 600-620°. After nitriding the parts are cooled to 60-70°. The nitrided layer was 30-40 mm. thick and resisted ordinary atm. conditions as well as moist gaseous O₂. H. Z. K.																																																																																																									
ASB-VLA METALLURGICAL LITERATURE CLASSIFICATION																																																																																																									
<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td> </tr> </table>						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ASINOVSKAYA, G.A., inzhener.; LOTSMANOV, S.N., kandidat tekhnicheskikh nauk,
doksent, redaktor.; ANTONOV, I.A., inzhener, redaktor.; POPOVA, S.M.,
tekhnicheskiiy redaktor.

[Flame brazing of metals.] Gazoplamennaya palka metallov. Moskva, Gos.
nauchno-tekhn. izd-vo khim. lit-ry, 1955. 70 p. (Moscow. Vsesoiuznyi
nauchno-issledovatel'skii institut avtogennoi obrabotki metallov. Ruko-
vodishchie materialy, no. 7)
(Brazing)

(MIRA 9:11)

San. Rev.

W. J. ...

ASINOVSKAYA, G.A.

Improving the weldability of brass by small additions of silicon.
Trudy VNIIAvtogen no.3:5-35 '55. (MIRA 11:12)
(Brass--Welding) (Silicon) (Gas welding and cutting)

ASINOVSKAYA, G.A.

Gas flux powder welding. Trudy VNIIAvtogen no.3:215-216 '55.
(Gas welding and cutting--Equipment and supplies) (MIRA 11:12)

ASINOVSKAYA, G.A., inzhener

Gas welding of I62 brass. Svar. proizv. no.6:15-16 Je '55. (MIRA 8:9)

1. Vsesoyuznyy Nauchno-issledovatel'skiy institut avtogennoy obrabotki
metallov. (Brass--Welding)

ASTINOVSKAYA G.A.

Liquid flux for some solders with hard sol-
 No. 11, 140-2; Refractory
 soldering with so-called gas
 passing Cu, through a volatil-

borate, b. 37-38°, is used those
 and boric acid readily dissolve
 glycerol, etc.) with formation
 boric acid contg. heterocyclic
 esters are dissolved in MeOH
 sprayed by gas flame used to pre-
 heat the article to be solder-
 ing. Borate ester immediately
 The following fluxes were de-
 38, anhyd. borax 37.5, MeOH
 in 4 vols. MeOH; (2) glycerol
 BtOH 51.5% (soln. dild. with 1
 flux is conducted to the tip by
 it is atomized into the flame.

ing with hard sol-
 No. 11, 140-2; Refractory
 soldering with so-called gas
 passing Cu, through a volatil-

is difficult to prep. Borax
 in polyatomic alcohols (glycol,
 internal complex esters of
 systems. The resultant
 or EtOH. This soln. is
 heat the article to be solder-
 forms flux in the flame.
 ped: (1) ethylene glycol
 51.5% (this soln. is dild.
 30.4, anhyd. borax 0.1,
 vols. EtOH). The liquid
 a special condition where
 J. N. Bodanski

3
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ASINOVSKAYA, G. A.

Subject : USSR/Engineering-Welding AID P - 4526
Card 1/1 Pub. 107-a - 12/13
Author : Asinovskaya, G. A.
Title : About the article of V. T. Zolotykh on "Evaporation
of Zinc and Formation of Pores in Welded Seams".
Periodical : Svar. proizv., 2, 28, P 1956
Abstract : This is ~~in~~ criticism of the article by V. T. Zolotykh
on the above subject published in this journal, 1956,
no. 1. Engineer Asinivskaya has additional data obtained
by her in research and experiments carried out with weld-
ing brass by the argonarc and by gas. Two graphs. Two
Russian references (1936, 1956).
Institution : None
Submitted : No date

ASINOVSKAYA, G.A.
 ANTONOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A.,
 inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DITYKUN,
 V.K., inzh.; ZAYTSEVA, V.P., inzh.; KAZHEKOV, P.P., inzh.; KARAN,
 Yu.B., inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.;
 KRZHECHKOVSKIY, A.K., inzh.; KUZNETSOVA, Ye.I., inzh.; MATVEYEV, N.N.,
 tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV,
 V.D., kand.tekhn.nauk; NINBURG, A.K., kand.tekhn.nauk; SPEKTOR, O.Sh.,
 inzh.; STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.;
 KEROMOVA, TS.S., inzh.; TSEUNEL', A.K., inzh.; SHASHKOV, A.N., kand.
 tekhn.nauk, dots.; SHLECHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.;
 EDEL'SON, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of
 Autogenous Working of Metals.] Mashiny i apparty konstruktsei
 VNIIAvtogen. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroitel'noi
 lit-ry, 1957. 173 p. (Moscow. Vsesoyuznyi nauchno-issledovatel'skii
 institut avtogennoi obrabotki metallov, no.9)
 (Gas welding and cutting--Equipment and supplies)

137-58-2-3242

ASINOVSKAYA, G.A.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 142 (USSR)

AUTHOR: Asinovskaya, G.A.

TITLE: Development of a Process of Powder Gas-flux Welding of Thick Brass (Razrabotka protsessa poroshkovoy gazo-flyusovoy svarki latuni bol'shoy tolshchiny)

PERIODICAL: Tr. Vses. n.-i. in-ta avtogen. obrabotki metallov, 1957, Nr 4, pp 69-96

ABSTRACT: A new process of powder gas-flux welding with pneumatic feed of the flux into the flame to obtain a dense weld of uniform strength has been developed. Uniform delivery of the flux in strictly determined quantities makes for stable results, particularly when the flux is delivered by an inert gas, namely, N_2 . Acceleration of welding can be achieved by eliminating the cooling of the welding pool, which occurs when an excess amount of borax is thrown, and the employment of a special burner, the orifice of which is closer to the metal being heated and yields a more intensive heating. The method is easily automated and may be recommended not only for welding thick brass, but for facing and other labor-consuming welding processes (repair of

Card 1/2

137-58-2-3242

Development of a Process of Powder Gas-flux Welding of Thick Brass

iron and brass castings, etc.). Brief technical and cost figures on the apparatus used in gas-flux welding are presented, and the techniques of brass welding are described.

G.K.
1. Brass--Welding 2. Welding fluxes--Applications 3. Gas welding--Procedures
4. Gas welding--Applications

Card 2/2

ASINOVSKAYA, G. A. Engineer

"Automation of Gas-Flux Welding."

paper presented at the Sverdlovsk Regional Conference on Gas-Flame Metal Working and Electric-Gas Processes, Sverdlovsk, 14-16 May 1958, Sponsored by VNIIAvtogen.

AUTHORS: Asinovskaya, G. A., Engineer,
Zelikovskaya, N. M., Engineer

SOV/67-11-5-4, 10

TITLE: Gaseous Fluxing Agent BM. 1 For the Welding of Brass
Apparatuses (Gazdobraznyy flux BM -1 dlya svarki
latunnykh apparatov)

PERIODICAL: Kislored, 1958, Vol 11, Nr 5, pp 29 - 36 (USSR)

ABSTRACT: For the brass containers and -tubes used in the
oxygen industry special requirements are set as to
their welding. Previously powdery fluxing agents
were used the dosage of which, however, was difficult
and which were unsuited for the automation of the
process. The fluxing agent under review is a readily boiling
organic mixture of methanol and 55-70% methylborate.
The flux is used for the production of oxidation of the
metal during the welding process. The reaction passes
as follows:
$$2B(CH_3O)_3 + 9O_2 = B_2O_3 + 6CO_2 + 9H_2O$$

The methylalcohol
burns completely in the flames. For the introduction
of the fluxing agent a flux feeder is inserted

Card 1/2

Gaseous Fluxing Agent BM -1 for the Welding of Brass Apparatuses

SOV/67-11-5-1/18

into the feed pipe of the acetylene, which permits the dosing. The acetylene is dried before because of the tendency of $B(CH_3O)_3$ towards hydrolysis. The welding is performed under addition of brass-like metals into the welding tank. Special attention requires the elimination of zinc vapors and zinc oxide from the process since the first make the slag porous and the latter are able to produce slag coatings. It was found that a dosage of the fluxing agent in the range between 15 and 40% flux in acetylene makes the weld seam the most stable. More than 40% renders seam cracky, while less than 15% renders it porous. For the investigation, brass plates of different thickness were welded. An average stability of the weld seam of 37-38 kg/mm² and of the welded joint of 31-33 kg/mm², a buckling angle of the seam of 180° was found and in the breaking test the crack appeared in the metal and not in the seam. There are 7 figures, 2 tables, and 3 references, 2 of which are Soviet.

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ASINOVSKAYA, G.A.

25(1) PHASE I BOOK EXPLANATION 307/2281
Vsesoyuzny nauchno-issledovatel'skiy institut avtomatizirovannoy obrabotki metallov
Kislorodnaya plazma i svarka (Oxygen Cutting and Welding) Moscow, Mashiz, 1959. 268 p. (Series: Itsa: Trudy, vyp. 5) Errata slip inserted. 4,800 copies printed.
Ed.: A.M. Shashkov, Candidate of Technical Sciences; Ed. of Publishing House: G.M. Boboliva; Tech. Ed.: V.D. El'mind; Golovin, Engineer.

PURPOSE: This collection of articles is intended for engineers, technicians, scientists, designers, and students of vtuzs. The book may be used for improving operational methods of oxygen and gas metalworking.

COVERAGE: This book contains articles on theoretical investigations of oxygen cutting and welding and problems related to the gas-flame treatment of metals. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Kechayev, V.D. [Candidate of Technical Sciences]. Statistical Method of Determining the [Micro] Coefficient of Oxygen Consumption at its Exit From Cylindrical Nozzles of Welding and Cutting Torches 154

The author investigates this process and reaches an approximate value of the μ -coefficient by determining the relationship between the diameter of the nozzle orifice, the oxygen pressure, and the condition of the nozzle.

Antonovskaya, G.A. [Engineer], and N.M. Zelikovskaya [Engineer]. Gas Soldering and Welding With EM-1 Gaseous Flux 200
The author discusses the process developed in other countries, and the equipment used.

Strizhevskiy, I.I. [Candidate of Chemical Sciences], and V.P. Zhayzeva [Engineer]. Preparation and Properties of Gaseous Fluxes 221

The author gives technological data of methylborate-methanol flux and makes recommendations for proper storage to prevent hydrolysis.

(V)

ASINOVSKAYA, G.A., inzh.; BELOVA, Ye.V., inzh.; ZELIKOVSKAYA, N.M., inzh.

Brass surfacing of ferrous metals with flux gas techniques.

Svar. proizv. no.2:28-31 I' '59.

(Hard facing) (Brass) (Flux (Metallurgy)) (MIRA 12:1)

ASINOVSKAYA, G.A., inzh.; ZELIKOVSKAYA, N.M., inzh.

Gas soldering and welding processes with HM-1 gaseous flux.

Trudy VNIIAvtogen no.5:200-220 '59.

(MIRA 12:6)

(Gas welding and cutting) (Solder and soldering) (Flux (Metallurgy))

ASINOVSAYA, Gnasya Abramovna; ZIKLIKOVSKAYA, Nataliya Mikhaylovna;
SHSHKOV, A.N., kand.tekhn.nauk, red.; SOBOLEVA, G.N., red.izd-va;
SMIRNOVA, G.V., tekhn.red.

[Gas welding of brass and its deposition on ferrous metals]
Gazovaya svarka latuni i naplavka ee na chernye metally. Pod red.
A.N.Shashkova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1960. 102 p. (Bibliotekha avtogenshchika, no.4/5)
(MIRA 14:3)

(Brass--Welding) (Gas welding and cutting)
(Hard facing)

ANTONOV, I.A., kand.tekhn.nauk; ASINOVSKAYA, G.A., inzh.

Introducing automatic control of gas flame brazing of
tubular joints. Trudy VNIIAvtogen no.7:104-122 '60.
(MIRA 13:7)

(Bracing--Equipment and supplies)
(Automatic control)

ASINOVSKAYA, G.A., inzh.

Investigating the properties of metal bonds in hard facing
ferrous metals by silicon brass. Trudy VNIIAvtogen no.7:
123-138 '60. (MIRA 13:7)
(Hard facing) (Iron-silicon alloys)

ASINOVSKAYA, G.A., inzh.

Investigations of copper-phosphorus brazing of brass. Trudy
VNIIAvtogen no.6:80-88 '60.:
(Brass) (Brazing) (MIRA 13:8)

ANTONOV, I.A., kand.tekhn.nauk; ASINCHENSKAYA, G.A., inzh.

Principles of introducing automatic control of brass facing
flat ring surfaces with gaseous flux. Trudy VNIIAvtogen no.8:
3-26 '62. (MIRA 15:6)
(Gas welding and cutting) (Metal cladding)
(Automatic control)

SHASHKOV, A.N., kand.tekhn.nauk; ~~ASINOVSKAYA, G.A.~~ inzh.; DOBKINA, Ye.N.,
inzh.

Investigating and developing a self-fluxing filler metal for
brass welding. Trudy VNIIAvtogen no.8:37-54 '62. (MIRA 15:6)
(Brass--Welding)

ASINOVSKAYA, Gnesya Abramovna; STRIZHEVSKIY, Iosif Isaakovich;
ZELIKOVSKAYA, Natal'ya Mikhaylovna; ZAYTSEVA, Vera Polikarpovna;
RAGAZINA, M.F., inzh., ved. red.; SHTERLINE, S.Z., dots., red.;
SOROKINA, T.M., tekhn. red.

[BM-1 gas-like flux for nonferrous metal welding and brazing]
Gazoobraznyi flius BM-1 dlia svarki tsvetnykh metallov i tverdoi
paiki. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii,
1958. 16 p. (Peredovoi nauchno-tekhnicheskii i proizvodstven-
nyi opyt. Tema 12. No.M-58-104/O) (MIRA 16:3)
(Flux (Metallurgy)) (Nonferrous metals--Welding)

ASINOVSKAYA, Gnesya Abramovna; ZELIKOVSKAYA, Nataliya Mikhaylovna;
KOROVIN, Andrey Ivanovich; KRAVETSKIY, G.A.; NEMKOVSKIY,
I.A.; OFITSEROV, D.M.; TESMENITSKIY, D.I.; FISHKIS, M.M.;
SHAPIRO, I.S.; GLIZMANENKO, D.L., kand. tekhn. nauk, red.;
KLIMOVICH, Yu.G., red.; DORODNOVA, L.A., tekhn. red.

[Flame metalworking processes] Gazoplamennaya obrabotka metal-
lov. [By] G.A. Asinovskaya i dr. Moskva, Proftekhizdat, 1962.
556 p. (MIRA 16:3)
(Gas welding and cutting) (Flame hardening) (Metal spraying)

ASINOVSKAYA, G.A.; SHASHKOV, A.N., kand. tekhn. nauk, red.;
SOBOLEVA, G.N., red. izd-va; GORDEYEVA, L.P., tekhn.
red.

[Gas welding of metals] Gazoplamennnaya paika metallov. Pod
red. L.N.Shashkova. Moskva, Mashgiz, 1963. 124 p. (Biblio-
techka avtogenshchika, no.9) (MIRA 16:7)
(Gas welding and cutting)

ASINOVSAYA, G.A., inzh.; SHAPIRO, I.S., kand.tekhn.nauk

Gas-arc welding of M3 copper with a thickness of up to 3 mm.
Svar. proizv. no.9:19-21 S '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.

SPEKTOR, O.Sh., inzh.; ASINOVSKAYA, G.A., inzh.; Prinimali uchastiye:
BELOVA, Ye.V., inzh.; SIEMENOVA, A.S., inzh.

Studying the nature and conditions of changes in the structure
and chemical composition of St.3 steel at the surface of a cut.
Trudy VNIIVtogen no.9:19-32 '63. (MIRA 16:12)

ASINOVSKAYA, G.A., inzh.

Effect of nickel on the process of the formation of a diffusive
layer at the boundary of silicon brass fusion with steel.
Trudy VNIIAvtogen no. 9:57-64 '63. (MIRA 16:12)

SHASHKOV, A.N., kand. tekhn. nauk; ASINOVSKAYA, G.A., inzh.; SPEKTOR, O.Sh.,
inzh.

Investigating the nature and conditions of the change in the chemical
composition of structural steel at the surface of the cut. Trudy
VNIIAvtogaz no.10:3-26 '64. (MIRA 17:10)

ANTONOV, I. A., kand. tekhn. nauk; ADINOV, K. YA., G. A., inzh.

Investigating the basic parameters of automatic gas welding under
flex of brass pipe. Trudy VNIIVoprosy no. 10:58-70 '64.

(MIRA 17:10)

ASINOVSKAYA, G.A., Inzh.; TIMOFEEVA, N.M., Inzh.

Automatic gas welding under flux of brand L62 brass. Trudy VNIIAvtogen
no.10:40-57 '64. (MIRA 17:10)

ARTYUKHOVSKAYA, S.A.; TESMENITSKIY, D.I.; ASINOVSKAYA, G.A.; BOYKO, M.I.;
KOLTUNOV, P.S.; NEKRASOV, Yu.L.; KOROVIN, A.I.; NECHAYEV, V.D.;
NINBURG, A.K.; SHASHKOV, A.N.; EDEL'SON, A.M.; ANTONOV, I.A.,
kand. tekhn. nauk, red.

[Using acetylene substitute gases for flame metalworking.]
Primenenie gazov-zamenitelei atsetilena pri gazoplamennoi
obrabotke metallov. Moskva, Mashinostroenie, 1964. 150p.
(Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avto-
gennoi obrabotke metallov. Spravochnye materialy po gazopla-
mennoi obrabotke metallov, no.23). (MIRA 17:9)

ASINOVSKAYA, G.A., inzh.; SHEYER, B.S., inzh.

Gas-flux deposition welding of brass on ferrous metals. Trudy
VNIIAvtogen no.11:15-29 '64. (MIRA 18:3)

SHASHKOV, A. N.; SPEKTOR, O. Ch.; ASINOVSKAYA, G. A.

"Influence of thermal cutting under metal on section borders"

paper presented at 18th Annual Assembly, Intl Inst of Welding, Paris, 5-10 Jul 1965.

ASINOVSKAYA, G.A., inzh.; IL'INA, I.I., inzh.

Porosity of the weld metal during the gas welding of cast
iron. Trudy VNIIAVTOGENMASH no.12:122-145 '65.
(MIRA 18:11)

ASINOVSKAYA, G.A.; LAKEDEMONSKIY, A.V.; LASHKO, N.F.; LASHKO, S.V.

The terminology of soldering. Trudy VNIIVTGENMASH no.12:
193-199 '65. (MIRA 18:11)

11.3950
11.4100

88624

S/170/61/004/002/002/018
B019/B060

AUTHORS:

Shpil'rayn, E. E., Asimovskiy, E. I.

TITLE:

Calculation of the Thermodynamic Properties and the
Construction of the is-Diagram of Alkali Metals

PERIODICAL:

Inzhenerno-fizicheskii zhurnal, 1961, Vol. 4, No. 2,
pp. 18-26

TEXT: In view of the relatively scarce data available on the thermodynamic properties of alkali metals the authors calculated the thermodynamic functions and set up the is-diagram. The following assumptions were made: critical parameters for sodium $p_{cr} = 355 \text{ kg/cm}^2$, $T_{cr} = 2270^\circ\text{K}$, for lithium $p_{cr} = (1400-1500) \text{ kg/cm}^2$, $T_{cr} = (2750-3300)^\circ\text{K}$, $\gamma_{cr} = (0.14-0.15) \text{ g/cm}^3$. These values permit the assumption that the vapors of alkali metals satisfy the equation of state of ideal gases. The volume of liquid metals was taken to be independent of pressure, while enthalpy and entropy were estimated as functions of pressure according to well-known thermodynamic relations. Moreover, the thermodynamic functions of the liquid phases were

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Calculation of the Thermodynamic Properties and
the Construction of the is-Diagram of Alkali
Metals

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regarded as being solely dependent on temperature. The thermodynamic properties of a monoatomic vapor were examined generally, and specifically near the saturation curve. Formulas are given and discussed concerning the calculation of entropy and enthalpy. The thermodynamic calculation of the vapor composition is discussed, the well-known equation of the reaction isotherm being applied to the vapor dimerization. Dimerization taken into account in the calculation of the vapor properties is finally dealt with. The construction of the is-diagram is described on the basis of the formulas given here. It is assumed for the first stage that the vapor is in equilibrium with the liquid and that this vapor is monoatomic. Only the knowledge of functions $i(T)$, $i_1^0(T)$, $s(T)$, $s_1(p,T)$, and $p_1(T)$ is required in this case. The following equations hold

$$i(p,T) = i_1^0(T) - \beta(p,T)\Delta I^0(T)$$

$$s(p,T) = s_1(p,T) + R \ln \left[\frac{(1-\beta/2)}{(1-\beta)} \right] - \beta(p,T)\Delta I^0(T)/T$$

p_1 is the pressure of saturated vapor at the temperature T . When dimerization is taken into account the upper limit curve is shifted and the form

Card 2/3

Calculation of the Thermodynamic Properties and
the Construction of the is-Diagram of Alkali
Metals

88624

S/170/61/004/002/002/018
B019/B060

of the isotherms and isobars of overheated vapor also changes. There are
2 figures and 24 references: 9 Soviet, 11 US, and 2 German.

ASSOCIATION: Energeticheskii institut, G. Moskva (Institute of
Power Engineering, Moscow)

SUBMITTED: September 20, 1960

Card 3/3

ZENGER-BREDD, I. [Sanger-Bredd, I.]; SYCHEV, V.V. [translator];
ASINOVSKIY, E.I. [translator]; KIRILLIN, V.A., red.;
SHEYNDLIN, A.Ye., doktor tekhn. nauk, prof., red.;
YAKIMOVICH, M.G., red.; KARPOV, I.I., tekhn. red.;
KOROTEYEVA, Yu.I., tekhn. red.

[Some properties of hydrogen and water as possible working
fluids for rockets] Nekotorye svoystva vodoroda i vodianogo
para - vozmozhnykh rabochikh tel raket. Moskva, Izd-vo ino-
str. lit-ry, 1962. 98 p. Translated from the English and
the German. (MIRA 16:1)

1. Chlen-korrespondent Akademii nauk SSSR (for Kirillin).
(Rockets (Aeronautics).)

11.4100
11.3900

32421
S/170/62/005/004/005/016
B111/B102

AUTHORS: Shpil'rayn, E. E., Asinovyukiv, E. I.

TITLE: Calculation of the latent evaporation heat of alkali metals
PERIODICAL: Inzhenerno-fizicheskii zhurnal, v. 5, no. 4, 1962, 35 - 40

TEXT: Evaporation of liquid alkali metals proceeds in two stages. First, atomic vapor is formed, subsequently, dimerization takes place to a certain percentage. Thus, the vapor pressure decreases and the liquid metal evaporates until equilibrium sets in. The vapor phase can be regarded as a single-component system irrespective of its real structure. For isobaric reactions the authors prove that the Clausius-Clapeyron equation from which the molar evaporation heat can be calculated holds also for this complex evaporation process. To determine the specific evaporation heat the molecular weight must be measured separately, e.g., by measuring the volume elasticity of vapor. The specific evaporation heat of alkali metals cannot be determined by pressure measurements only, but the degree of vapor dimerization has to be taken into account. The authors demonstrate that in a number of papers the numerical data on the specific evap-

Card (1/3)

Calculation of the latent ...

S/170/62/005/004/005/016
B111/B102

oration heat of alkalis are incorrect because dimerization has not been taken into account. For lithium, sodium, and potassium, the following correct values are given:

	Atomic weight	Molar evaporation heat, kcal/mole	Specific evaporation heat, kcal/kg
Li	6,940	36,3	4636
Na	22,991	24,1	926
K	39,100	19,5	473

These values hold for the boiling point of the individual metals. There are 1 table and 16 references: 5 Soviet and 11 non-Soviet. The four most recent references to English-language publications read as follows: K. K. Kelley, Bur. of Mines., Bull. 383, Washington, 1935; L. Quill, The chemistry and metallurgy of miscellaneous materials, 1950; R. Lyon, Handbook on Liquid Metals Suppl., Washington, 1950; W. H. Evans et al., J. Res. Nat. Bur. Stand., 55, 83, 1955.

LABORATORY: Laboratoriya vysokikh temperatur AN SSSR, S. Moskva (Laboratory of High Temperatures AS USSR, Moscow)
Card 2/5

Calculation of the latent ...

SUBMITTED: August 4, 1961

S/170/62/005/004/005/016
B111/B102

X

Card 3/3

ASINOVSKIY, E. I., SHEYNDLIN, A. YE.,

"Study of Electric and Optical Properties of Argon in Stabilized Arc,"

report presented at the 6th Intl. Conf. on Ionization Phenomena in Gases,
Paris, France, 8-13 Jul 63

ASINOVSKIY, E. I., and SHEYNDLIN, A. Y.,

"Nekotorne Rezul'tati Issledovaniy Argona v Ctabilizirovannoy Duge. (Some Results of Investigations with Argon in a Stabilized Arc.)"

report presented at the Intl. Symposium on High Temperature Technology held at Asilomar, California, 8-11 Sep 63

SHEYNDLIN, A.Ye.; ASINOVSKIY, E.I.; BATURIN, V.A.; BATENIN, V.M.

Apparatus for producing plasma and studying its properties.
Zhur. tekhn. fiz. 33 no.10:1169-1172 O '63. (MIRA 16:11)

1. Nauchno-issledovatel'skiy institut vysokikh temperatur,
Moskva.

SHEYNDLIN, A. Ye.; BATENIN, V. A.; ASINOVSKIY, E. I.

"Experimental investigation of non-equilibrium ionization in a mixture of argon and potassium."

report submitted for the Intl Symp on Magnetohydrodynamic Electrical Power Generation, Paris, 6-10 Jul 64.

Inst of High Temperatures, Moscow.

ALEKSANDROVA, M.A.; ASINOVSKIY, E.I.; BALANDIN, V.V.; BRODYANSKIY, V.M., kand. tekhn. nauk; VAKHRAMEYEVA, Ye.A.; VERBA, M.I., kand. tekhn. nauk; VORONIN, T.A., kand. tekhn. nauk; GIRSHFEL'D, V.Ya., kand. tekhn. nauk; DEYCH, M.Ye., prof. doktor tekhn. nauk; IVIN, F.A.; LAPSHIN, M.I., kand. tekhn. nauk; LIPOV, Yu.M., kand. tekhn. nauk; LYUBARSKAYA, A.F.; MAKARENKO, I.D.; MIRIMOVA, V.M.; NEVLER, S.Ye.; ROZANOV, K.A., kand. tekhn. nauk; ROTACH, V.Ya., kand. tekhn. nauk; KHMEL'NITSKIY, R.Z., kand. tekhn. nauk; SHEVCHENKO, E.G.; BOGOMOLOV, B.A., red.; VAYNSHTEYN, K.N., spets. red.; LICHAK, S.K., spets. red.

[German-Russian heat engineering dictionary] Nemetsko-russkii teplotekhnicheskii slovar'. Moskva, Sovetskaya entsiklopediya, 1964. 512 p. (MIRA 18:1)

1. Moscow. Energeticheskii institut. 2. Moskovskiy energeticheskii institut (for all except Vaynshteyn, Lichak).

E:00485-66

EFT(o)/EFT(n)-2/EPA(v)-2/EWT(1)/EWT(m)/EWG(m)/EWP(b)/EWP(t): IJP(c)

ACCESSION NR: AP5020554

UR/0294/85/003/004/0530/0535
533.915:535.338:546.293

AUTHOR: Asinovsky, E. I.; Batenin, V. M.

TITLE: Experimental investigation of the continuous spectrum of an argon plasma

SOURCE: Teplofizika vysokikh temperatur, v. 1, no. 4, 1965, 530-535

TOPIC TAGS: plasma physics, ionized plasma, argon, emission spectrum, electric discharge, photoionization

ABSTRACT: The object of the work was an experimental investigation of the continuous spectrum of an argon plasma at atmospheric pressure and at temperatures of 10,000-16,000 K and in the wave length interval of 2500-7500 A. The experimental unit used an electric arc operating at atmospheric pressure and stabilized by cooled copper walls. The coefficient of continuous irradiation was measured by comparing the spectral brightness of the plasma source with a standard. For this purpose, an image of part of the arc, using a quartz achromatic condenser with $f = 150$ mm, was projected into the aperture of a DFIS-6 spectrograph with a

Card 1/2

L. 00485-66

ACCESSION NR: AP5020554

linear dispersion of 6.25 A/mm. The spectrum of an iron arc was employed as a wave length scale. The experimental data were compared with the Biberman-Norman Theory of the continuous spectrum of a low temperature plasma. On the basis of the experimental data, the authors succeed in establishing a relationship between the displacement of the threshold of photoionization in the plasma and the brightness of the continuum, and in evaluating the photoionization section from the 4s level. "In conclusion, the authors wish to thank V. A. Fabrikant for proposing the subject of the present work, L. M. Biberman and G. E. Norman for their useful discussions, and N. I. Rumyantsev for his aid in working up the experimental material." Orig. art. has: 3 formulas, 4 figures, and 1 table

ASSOCIATION: Nauchno-issledovatel'skiy institut vysokikh temperatur. (Research Institute for High Temperatures)

SUBMITTED: 20Feb65

ENCL: 00

SUB CODE: ME, NP

NR REF.SOV: 007

OTHER: 011

Cord 2/2

L 21990-66

ACCESSION NR: AP5025980 JD/VV/AT EWT(1)/EWT(m)/ETC(1)/EPF(n)-2/ENG(m)/ENP(t)/EWA(1) IJP(c)

AUTHOR: Asinovskiy, E. I.; Kirillin, A. V.

UR/0294/65/003/005/0677/0685
533.932.15

TITLE: Experimental determination of the thermal conductivity coefficient of argon plasma

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 5, 1965, 677-685

TOPIC TAGS: argon, plasma jet, heat conductivity

ABSTRACT: The object of the work was the experimental determination of the coefficient of thermal conductivity of an argon plasma at atmospheric pressure and temperatures of 10,000-13,000 K. The required temperatures were achieved with an electric arc stabilized by a cooled copper wall. Studies were made of the dependence of the potential of the electric field and of the radial temperature distributions on the arc current for different diameters of the stabilizing channel (4, 6, and 8 mm). The source of the plasma jet operated in a stable manner for several hours at specific loads reaching 4.5 kilowatts/cm. The potential of the electric field in the column of the jet was determined by experimental determination of the distribution of the potential along the arc with respect to the cathode. It

L 21990-66

ACCESSION NR: AP5025980

5
was found that at temperatures of 10,000-11,000 K, the experimental values of the thermal conductivity are practically independent of the diameter of the channel, and correspond to the theoretical values. At temperatures above 11,000 K, there is a spread of the experimental points according to the diameter, a larger diameter corresponding to more effective thermal conductivity in the central zone of the arc column. It was found that the character of the arc does not depend on the velocity and the direction of flow of the plasma in the stabilizing channel. Values are also obtained for the total radiation coefficient of an argon plasma at temperatures from 10,000 to 13,500 K. By extrapolation of the effective thermal conductivity to zero diameter of the channel, the values of the thermal conductivity correspond to the theoretical. "In conclusion, the authors express their thanks to A. E. Sheyndlin for his direction of the work, to V. M. Batenin, L. M. Biberman, and V. A. Fabricant for their valuable and interesting observations, and to N. I. Rumyantseva for working up the experimental data." Orig. art. has: 8 formulas, 7 figures and 1 table
ASSOCIATION: Nauchno-issledovatel'skiy institut vysokikh temperatur (High Temperature Scientific Research Institute)

Card 2/3

L 21990-66

ACCESSION NR: AP5025980

SUBMITTED: 28May65

NR REF SOV: 007

ENCL: 00

SUB CODE: 20

OTHER: 0.16

Card 3/3 *YV*

PUL'YER, Yu.M., doktor tekhn. nauk; ASINOVSKIY, E.N., inzh.

Operation of a distance-type transformer transmission system
with tracking and dampened selsyn receivers. Trudy MIIT no. 188,
39-54 '64. (MIRA 17:10)

115 INOVSKIY M.A.

MASLAKOV, A., inzhener; ASIMOVSKIY M.A. inzhener

Producing prestressed reinforced panels. Stroitel' no. 5:4-5 My '57.
(Concrete slabs) (MLRA 10:6)

ASINOVSKIY, M.A.

Making prestressed MA and MB panels with seven cavities.
Suggested by M.A.Asinovskii. Rats.i izobr.predl.v stroi.
no.8:11-12 '58. (MIRA 13:3)

1. Po materialam tresta No.5 Ministerstva stroitel'stva BSSR.
(Prestressed concrete)

KURMAKIN, D.I.; ASINOVSKIY, M.A.

Making prestressed MA and MB panels with six cavities.
Suggested by D.I.Kurmakin, M.A.Asinovskii. Rats.i izobr.
predl.v stroi. no.8:13-16 '58. (MIRA 13:3)

1. Po materialam tresta No.5 Ministerstva stroitel'stva BSSR.
(Prestressed concrete)

TONOYAN, A.G., kand.tekhn.nauk; ASINOVSKIY, M.A., technolog

Reducing the height and the effective thickness of concrete in making PKZhN slabs. Suggested by A.G.Tonoian, M.A.Asinovskii.
Rats.1 isobr.predl.v stroi. no.16:29-30 '60. (MIRA 13:9)

1. Stroitel'nyy trst No.5 Ministerstva stroitel'stva BSSR (for Tonoian).
2. Zavod stroitel'nykh detaley (for Asinovskiy).
(Concrete slabs)

VYAL'YAOTS, O. [Väljaots, O.]; ASINOVSKIY, M.

Issuring credit to nonserial machinery manufacturing enterprises.
Den. i kred. 19 no. 6154-55 Je '61. (MIRA 14+5)

1. Nachal'nik finansovogo otdela Estonskogo sovnarkhoza (for Vyal'yaots).
2. Nachal'nik finansovogo otdela Izhorskogo mashinostroitel'nogo zavoda im. A. Zhdanova (for Asinovskiy).
(Machinery industry—Finance)

ASINOVSKIY V.

BEZBORODOV, M.A., professor; YERMOLENKO, N.F., professor; ASINOVSKIY, V.,
otvetstvennyy za vypusk; ALEKSANDROVICH, Kh., tekhredaktor

[Essays on the history of glass chemistry and technology in
Russia] Ocherki po istorii khimii i tekhnologii silikatov v Rossii.
Minsk, Izd-vo Akademii nauk Belorusskoi SSR, 1950 197 p. (MLRA 7:11)

1. Chlen-korrespondent Akademii nauk Belorusskoy SSR (for Bezborodov)
2. Deystvitel'nyy chlen Akademii nauk Belorusskoy SSR (for Yermolenko)
(Glass-History)

ASINOVSKIY, V.,; LUKOVNIKOV, A.

Fitting propulsion bulba on the propeller. Mor. Flot 23 no. 12:
37-38 D '63. (MIRA 17:5)

1. Starshiy inzh. Tsentral'nogo proyektno-konstrukorskogo
byuro No. 1 Ministerstva morskogo flota (for Asinovskiy).

KATSMAN, F.M., inzh.; ASINOVSKIY, V.I., inzh.

Calculating propeller characteristics with the help of fast-
acting electronic digital computers. Sudostroenie 29 no.5:
9-12 My '63. (MIRA 16:9)
(Propellers) (Electronic digital computers)

ASINOVSKIY, V.I., inzh.; KATSMAN, F.M., inzh.; LUKOVNIKOV, A.A., inzh.

Advisability of providing propulsion bulbs on seagoing ship rudders.
Sudostroenie 29 no.11:8-10 N '63.
(MIRA 16:12)

ROMAN'KO, M.Ye.; ASIPOVICH, A.N., inzh.

Use of tracklaying cranes for current repair work. Put' i put.khoz.
7 no.8:26 '63. (MIRA 16:9)

1. Nachal'nik putevoy mashinnoy stantsii No.22, stantsiya Kalachinskaya, Zapadno-Sibirskoy dorogi (for Roman'ko).
 2. Stantsiya Kalachinskaya, Zapadno-Sibirskoy dorogi (for Asipovich).
- (Railroads—Tracklaying machinery)

L 60262-65 EWG(m)-2/EWT(m) JAN 1966
 ACCESSION NR: AP5012819
 AUTHOR: Asiryan, A. M.
 TITLE: A study of two possible uses of a vacuum in concrete technology
 SOURCE: AN ArmSSR. Izvestiya. Seriya tekhnicheskikh nauk, v. 18, no. 1, 1965, 57-70
 TOPIC TAGS: concrete, construction material, vacuum degassing, vacuum, vacuum technology
 ABSTRACT: A discussion of ordinary vacuum treatment of concrete with deaeration is presented. The purpose of the article is to outline a rational range of applicability of vacuum methods in concrete technology. The first topic treated is a review of the properties of basic materials and the methodology of calculation of the solid, liquid, and gaseous phases of a concrete mixture, plus a discussion of the research program. Included are descriptions of cement and aggregates. Particular attention is given to the tendency of the materials to retain pore water. Some unit volume and unit weight equations are given for evaluating separate phases in a material. Experimental data pertaining to vibratory deaeration are given showing the reduction in entrained air content with increasing duration of vibration. Comparison is made of entrained air reduction in deaerated and vibrated concrete exposed to equal finishing durations. Several mixes were exposed to vibration, vacuum treatment, and
 Cord 1/2

L 60262-55

ACCESSION NR: AP5012819

subsequent deaeration treatment for varying time durations to yield plotted values of retained air volumes. The three air reducing methods are compared in tabular form with respect to workability, unit weight, and tensile and compressive strength for varying cure durations. The author concludes by stating the conditions for which one air reducing method is generally better than another. Further research is recommended for the purpose of finding feasible means of field deaeration of concrete pours. Orig. art. has: 8 figures, 4 equations, and 3 tables.

ASSOCIATION: Armyanskiy nauchno-issledovatel'skiy institut stroitel'nykh materialov i oozoruzheniy (Armenian Scientific Research Institute of Construction Materials and Reinforcement)

SUBMITTED: 22Oct64

NO REF SOV: 005

ENCL: 0

OTHER: 001

SUB CODE: MT

Cord 2/2 *lip*

IORDANISHVILI, G.S.; ASITASHVILI, S.G.; IDILASHVILI, L.A.

Dynamics of the formation of ammonia in muscle extension. Soob.
AN Gruz. SSR 24 no.6:663-668 Je '60. (MIRA 13:9)

1. Tbilisskiy gosudarstvennyy universitet im.Stalina. Predstavleno
akademikom P.A. Kometiani.
(Muscle) (Ammonia)

TUROVSKIY, I.Ya., kand.tekhn.nauk; ASKADSKIY, A.A., inzh.

Simplifying the calculations for the alignment of long railroad
curves. Trudy MIIT no.147:107-111 '62. (MIRA 16:5)
(Railroads--Curves and turnouts)

TUROVSKIY, I.Ya., kand.tekhn.nauk; ASKADSKIY, A.A., inzh.

Using the T4 instrument in planning the relocation of railroad
lines. Transp. stroi. 11 no.1:45-46 Ja '61. (MIRA 14:1)
(Railroads—Curves and turnouts)

ASKADSKIY, A. A.
NIKOLAYEV, L. A.; ASKADSKIY, A. A.

Effect of ultrasonic waves on catalytic processes. Khim. nauka i prom.
3 no.1:131-132 '58. (MIRA 11:3)

1. Kafedra khimii Moskovskogo instituta inzhenerov transporta.
(Ultrasonic waves--Industrial applications) (Catalysis)

ACCESSION NR: AP4034924

S/0181/64/006/005/1430/1434

AUTHORS: Askadskiy, A. A.; Slonimskiy, G. L.

TITLE: Determining the parameters of transient behavior of resistance at brittle fracture

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1430-1434

TOPIC TAGS: brittle fracture, temperature transient, tensile stress, polymer, polyaryl, tetrathalic acid, isophthalic acid, phenophthalene, polyan type dynamometer, neck formation

ABSTRACT: The temperature-transient dependence of the resistance of solids was studied by S. N. Zhukov (Vestn. AN SSSR, 11, '75, 1957), and the relation $\tau = \tau_0 e^{\frac{u_0 - T}{kT}}$ was derived, where τ is the lifetime of the material, σ the

stress, T the absolute temperature, and u_0 and ν are constant coefficients governing the resistance of the material. In this present work the results of experiments on fracture of polymers at a constant rate of increase of the tensile stress are given, and the values of the constants u_0 and ν are calculated. The material used was a polyaryl in a base of tetra- and isophthalic acids and

Cord 1/3

ACCESSION NR: AP4034924

phenophthalene, synthesized at the Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elementoorganic Compounds AN SSSR). From this material tapes were prepared and tested in a Polyan-type dynamometer at temperatures 20-150C at a grip speed of 0.066 mm/sec. As shown by the results plotted on Fig. 1 of the Enclosure, brittle fracture occurred at 80 and 150C, with practically no neck formation. The calculations showed that for the isophthalic base, γ and δ , were 1.70 kcal/mole $\cdot$ mm²/kgm and 28.0 kcal/mole respectively, while for the tetraphthalic base, they were 2.18 kcal/mole $\cdot$ mm²/kgm and 33.7 kcal/mole respectively. Orig. art. has: 9 formulas and 4 figures.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR Moscow (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 28Nov63

SUB CODE: OC, SS

NO REF SOV: 010

ENCL: 01

OTHER: 000

Cord 2/3

ACCESSION NR: AP4034924

ENCLOSURE: 01

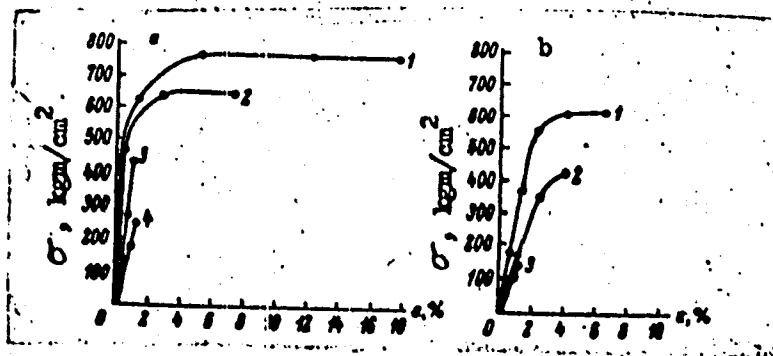


Fig. 1. Extension curves for polyaryls.

a. Tetraphthalic base, temperature C: 1) 20; 2) 50; 3) 80; 4) 150
b. Isophthalic base, temperature C: 1) 20; 2) 80; 3) 150

Card 3/3

L 01040-67 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6019546

SOURCE CODE: UR/0190/66/008/006/1109/1112

AUTHOR: Slonimskiy, G. L.; Askadskiy, A. A.; Korshak, V. V.; Vinogradova, S. V.; Gribova, I. A.; Chumayevskaya, A. N.; Krasnov, A. P.; Moldabayeva, M. K. 43 E

ORG: Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Investigation of the relaxation properties of filled polyarylates¹⁵

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 6, 1966, 1109-1112

TOPIC TAGS: solid mechanical property, polymer rheology, polyaryl plastic, synthetic material, POLYARYLATE, FILLER

ABSTRACT: Relaxation properties of commercial F-1¹⁵ polyarylate filled¹⁵ with copper powder (0-80 wt %) were examined in the 140°-260°C temperature range and in the 50-600 kg/cm² load range. The object of the study was to fill the gap in the pertinent literature. The temperature dependence of the relaxation time for F-1 polyarylates with various copper contents is graphed. It was found that in up to 40 wt % copper, the overall activation energy of the relaxation of the copper filled F-1 polyarylate declines (in comparison to the unfilled F-1 polyarylate) with increasing copper content. For the 40-80 wt % copper range, the overall activation energy of relaxation increases with increasing copper content. Changes in the activation energy of relaxation as a

Card 1/2

UDC: 678.01:53+678.674

L 01010-67

ACC NR: AP6019546

function of copper content in F-1 polyarylate are graphed. Orig. art. has: 5 figures,
1 formula. 0

SUB CODE: 07,11/

SUBM DATE: 09Jun65/

ORIG REF: 007

awm

Card 2/2

L 00828-67 EWT(m)/EWP(j)/T IJP(c) WW/RN

ACC NR: AP6027767 (A) SOURCE CODE: UR/0190/66/008/008/1342/1345

AUTHOR: Askadskiy, A. A.

ORG: Institute of Organoelemental Compounds AN SSSR (Institut elemento-organicheskikh soyedineniy AN SSSR)

TITLE: Two types of relaxation processes in vitrous polyarylates

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 8, 1966, 1342-1345

TOPIC TAGS: relaxation process, chain polymer, polyarylate

ABSTRACT: The temperature dependence of relaxation properties of rigid-chain polymers (F-1 and F-2 polyarylates) was investigated. It was shown that the vitrous state region should be divided into two substates (not taking transfer to brittle state into consideration) which are characterized by the different mechanisms of relaxation processes. The author thanks G. L. Slonimskiy for his

Card 1/2

UDC: 678.01:53+678.674

L 00828-67

ACC NR: AP8027767

3
interest in the study and valuable advice and V. V. Korshak, S. V. Vinogradov,
and S. N. Salazkin for submitting polyarylates. Orig. art. has: 4 figures and
2 formulas. [Based on author's abstract] [NT]

SUB CODE: 07/ SUBM DATE: 04 Jun 65/ ORIG REF: 004/

Cord 2/2

hs

ACCESSION NR: AP4041160

5/0020/64/156/004/0924/0925

AUTHOR: Slonimskiy, G. L.; Korshak, V. V.; Vinogradova, S. V.; Kitaygorodskiy, A. I.; Askadskiy, A. A.; Salazkin, S. N.; Belavtseva, Ye. M.

TITLE: Physico-chemical means of regulating supermolecular structure and mechanical properties of amorphous polyarylate F-1.

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1964, 924-925, and insert facing p. 924

TOPIC TAGS: polyarylate, supermolecular structure, amorphous polymer, mechanical property, control, regulation, phenolphthalein isophthalic acid polymer, polymerization, reaction medium, brittleness, elongation, strength, impact strength, rigid macromolecular structure

ABSTRACT: The supermolecular structure and consequently the mechanical properties, especially the brittleness, of amorphous polyarylate F-1 (phenolphthalein-isophthalic acid based polymer) were improved by selecting a new polymerization reaction medium. Electron microscopic comparison of F-1 polymerized as previously in ditolylmethane in which it is insoluble and polymerized in α -chloronaphthalene in which it is soluble showed the structure no longer comprised a multitude of fine weakly bonded spherical particles, but was fibrillar with no fractures. In the

Card 1/2

ACCESSION NR: AP4041160

ditolylmethane the free energy of formation of the coagulated macromolecule was less than for an uncoiled macromolecule. The desired change in the superstructure (i.e., uncoiling) was effected by the solvent. The mechanical properties of the two types of F-1 of the same molecular weight (28,000) were compared. The elongation increased from 10-20% in the brittle to 50-80% in the fibrillar material; strength increased from 640-740 kg/cm² and impact strength from 2-3 to 6-10 kg.cm/cm². Thus brittleness was reduced by a factor of about 4. In the 50,000 molecular weight material the elongation was 130% and impact strength, 20 kg.cm/cm². It is concluded that the mechanical properties of polymers with rigid macromolecules should be regulated not only by chemical changes in the macromolecule but also by the physical conditions of the surrounding media in which the macromolecule is formed. Orig. art. has: 2 figures.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Organometallic compounds Academy of Sciences SSSR)

SUBMITTED: 02Mar64

ENCL: 00

SUB CODE: 00, SS

NO REF SOV: 005

OTHER: 000

Cord 2/2

L 25105-65 EPA(s)-2/EPF(a)/EPR/E/P(1)/T

Pc-l/Pr-l/Ps-l/Pt-10 W/RM

ACCESSION NR: AP5002821

8/0191/65/000/001/0014/0016

AUTHOR: Askadsky, A.A.

TITLE: Plastification of polyarylate

SOURCE: Plasticheskiye massy, no. 1, 1965, 14-16

TOPIC TAGS: polyarylate hot molding, high molecular plasticizer, polyester plasticizer, plasticizer effect, yield point, molding temperature, polymer molding, polysebacate, phenolphthalein, polyisophthalate

ABSTRACT: The authors selected, tested and recommend addition of a high-molecular plasticizer (a polyester of sebacic acid and phenolphthalein) to improve the hot forming qualities of a polyarylate of isophthalic acid and phenolphthalein (mol. weight 24,000) with excellent mechanical strength and thermal stability. The tests involved samples of the polyarylate without plasticizer at 310°C and samples containing 5, 10 and 15% of the plasticizer at 300, 290 and 280°C, respectively. Pressure was constant at 60 kg/cm². Optimal results were obtained at a 10% content of plasticizer. The yield point dropped somewhat as the latter increased, so that the molding temperature also dropped for monolithic samples (i.e. from 310 to 290°C) when 10% of plasticizer was added. "In

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L 25405-65

ACCESSION NR: AP5002821

3

conclusion, the author expresses gratitude to G. L. Slonimskiy for valuable comments, as well as to S. V. Vinogradova and S. N. Salazkin for synthesizing and supplying the test samples." Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 010

OTHER: 00

Card 2/2

L 53045-02 EWT(m)/EPF(c)/EPR/EPF(3)/T Pc-4/Pt-4/Ps-4 RPL W/R

ACCESSION NR: AP5011988

UR/0374/65/000/001/0036/0043
673:539.377

AUTHORS: Slonimskiy, G. L. (Moscow); Askadskiy, A. A. (Moscow)

TITLE: Defining of parameters for temperature and stress relaxation time dependence

SOURCE: Mekhanika polimerov, no. 2, 1965, 36-43

TOPIC TAGS: stress relaxation, relaxation time, polymer, polymethylmethacrylate, polycarbonate, polyarylate

ABSTRACT: An experimental method is presented for the determination of the constants appearing in the equation for the thermal dependence of the relaxation time as proposed by G. I. Gurevich (ZhTF, 1947, 17, 1491) and others;

Here τ - time of relaxation, σ - stress, T - absolute temperature, R - the gas constant, τ_0 , u_0 , γ - constant coefficients describing the relaxation properties of the polymeric material. Measurements were made on three polymers:

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L 55046-68

ACCESSION NR: AP5011988

polymethylmethacrylate, polycarbonate (macrodon), and polyarylate F-1. The re-
laxometer of G. A. Dubov and V. R. Fegel (ZhTF, 1955, 2, 2542) was used. Em-
ploying two different initial arrangements of the specimen and periodic heating
with linearly increasing amplitude (see Fig. 1 on the Enclosure), maxima of σ vs
temperature were obtained. Applying Maxwell's equation for an elastic-viscous
body to the maxima, values for u_0 and γ for all three polymers were calculated.
It is proposed that the curve for $\ln$ maxima determines the working range capacity
of the polymer. It was found that polymethylmethacrylate had the smallest and
polyarylate F-1 had the highest initial energy of the activation u_0 . V. P.
Sidorova took part in the performance of the experiments. Orig. art. has: 2
tables, 7 graphs, and 15 equations.

ASSOCIATION: none

SUBMITTED: 16 Nov 64

NO REF SOV: 003

INOL: 01

SUB CODE: 00, 1D

OTHER: 000

Cord 2/3

L 55046-59
ACCESSION NR AP5011988

ENCLOSURE 01

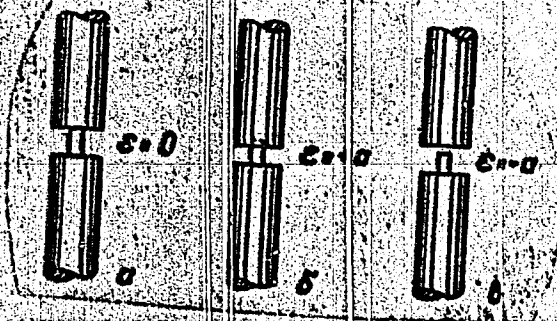


Fig. 1. Schematic position of polymer specimen and relaxometer cylinders
Cord 3/3

SVITSYN, R.A.; ZHIGACH, A.F.; SARISHVILI, I.G.; ASKADSKIY, A.A.; SOROKIN, P.Z.

Studying the properties of polyester carboranes. Plast. massy
no.8:18-20 '65. (MIRA 18:9)

L 47003-66 EWT(m)/EWP(j)/T IJP(c) WW/RM
ACC NR: AP6027283 (A) SOURCE CODE: UR/0191/66/000/008/0056/0058

AUTHOR: Korshak, V. V.; Slonimskiy, G. L.; Vinogradova, S. V.; Gribova, I. A.; Askadskiy, A. A.; Krasnov, A. P.; Chumayevskaya, A. N.; Moldabayeva, M. K. 18
13

ORG: none

TITLE: Effect of fillers on the properties of compositions based on heat-resistant polymers 15

SOURCE: Plasticheskiye massy, no. 8, 1966, 56-58

TOPIC TAGS: filler, polymer physical property, impact strength, hardness

ABSTRACT: The effect of fillers (powdered copper and aluminum, talc, quartz, graphite and boron nitride added in amounts of 20, 40, 60, 80 and 90 wt. %) on the specific impact strength and hardness of compositions based on F-1 polyarylate (prepared from phenolphthalein and isophthalic acid) and FF-40 phenolphthalein-formaldehyde resin was studied. The compositions based on F-1 showed a decrease in impact strength with increasing content of all fillers, probably because the filler particles hinder the development of fibrillar superstructures and make the polymer structure inhomogeneous, thus impairing its properties. The specific impact strength of specimens based on FF-40 was higher for all fillers than that of the original specimens, the metal powders having a greater effect than the mineral fillers. The hardness curves for F-1 showed maxima in the case of the metal powders, quartz, and boron nitride; the existence of

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UDC: 678.6.01:536.495]:678.046.2/.3

L 47008566

ACC NR: AP6027283

these maxima is explained. Talc did not increase the hardness of F-1 in any amount. The hardness of FF-40 was greater for all fillers than that of F-1 specimens. Orig. art. has: 5 figures.

SUB CODE: 11, IC/ORIG REF: 002

Card 2/2 vmb

ASKALONOV, I. N.

Askalonov, I. M. "On blind-firing injuries to the knee joint," Trudy
Kuybyshevsk. gos. med. in-ta, Vol. I, 1948, p.17-21

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

ASKALONOV, I. N.

U-7

USSR / Pharmacology, Toxicology. Chemotherapeutic Agents.

Abs Jour : Ref. Zh.-Biol., No 2, 1958, No 8152

Author : Askalonov, I. N., Tsivina, D. V.

Inst

Title : An Intra-arterial Injection of Antiseptics and Antibiotics in the Treatment of Experimentally Infected Wounds in the Soft Tissues of the Extremities.

Orig Pub : Tr. Kuybyshevsk. Med. in-ta, 1954, 5, 236-241.

Abstract : Favorable prophylactic and therapeutic effects of intravenous infusions of penicillin with sodium sulfathiazole and of penicillin with novocaine have been demonstrated in the treatment of infected soft tissue wounds.

Card : 1/1

ASKALONOV, I.N., professor; ARONOV, M.S., dotsent

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102330007-5"

Nerve healing in an amputation stump under aseptic conditions and with suppuration. Ortop., travm. protez. 17 no.5:21-23 S-0 '56.

(MLBA 10:1)

1. In kafedry operativnoy khirurgii (sav. - prof. I.N.Askalonov) Kuybyshevskogo meditsinskogo instituta.

(AMPUTATION STUMPS

healing of nerves in aseptic cond. & in suppuration)

(NERVES, PERIPHERAL, surgery,

healing in amputation stumps in aseptic cond. & in suppuration in dogs)

SOV/177-58-2-8/21

17(12,14)

AUTHORS: Askalonov, I.N., Professor, and Tsivina, D.V., Candidate of Medical Sciences

TITLE: Penicillin Therapy for Penetrating Gun-Shot Wounds to the Knee Joint in an Experiment

PERIODICAL: . Voenno-meditsinskiy zhurnal, 1958, Nr 2, pp 49-52 (USSR)

ABSTRACT: In the introduction, the authors deal briefly with the use of antibiotics in the treatment of gun-shot wounds to the knee joint, and problems connected therewith. The article is devoted to the description of an experiment performed by the authors on 3 groups of mature dogs, 40 in all. Each dog received a bullet wound from a small calibre rifle in the knee joint of one hind leg. A staphylococcus culture with 1 - 2 billion microbes was introduced into the wound, followed, in all but one, the control, group, by 50,000 units of penicillin in a 1/2% solution of novocain. Similar doses of antibiotics were introduced twice daily for a period of one week. The text gives detailed descriptions of the treatment given each group of dogs, both surgical and antibiotic,

Card 1/2

SOV/177-58-2-8/21

Penicillin Therapy for Penetrating Gun-Shot Wounds to the Knee Joint in an Experiment

and the results of this treatment. Best results - 11 out of 14 regained full use of the joint, 2 had only slight restrictions - were obtained in group 2, which received injections of penicillin into a sealed joint cavity. Sealing of the cavity allowed the antibiotic to maintain a high degree of concentration. The authors conclude that the system of complex therapy described deserves wider use in clinical practice. The following persons are mentioned in the text: Roze, Napalkov, Mukhamedbekov, Yelanskiy, Bogatyrev, Banaytis, Yeolyan, Diterikhs, Lebedeva, Serzhanin, Stanislavskaya.

Card 2/2

ASKALONOV, I.N., prof.; ARONOV, M.S., dots.

Comparative evaluation of some methods of bone treatment in amputation under aseptic conditions and in suppurations; experimental data.
Ortop.travm. i protez. 20 no.2:30-33 F '59. (MIRA 12:12)

1. Iz kafedry operativnoy khirurgii (zav. - prof. I.N. Askalonov)
Kuybyshevskogo meditsinskogo instituta.

(AMPUTATION, exper.

bone treatment in aseptic cond. & in suppurations,
comparative methods in dogs (Rus))

ASKALONOV, I.N., prof. (Kiybyshev)

"Operative surgery and topographic anatomy" by V.P.Voznesenskii
[professor] and V.A.Ivanov [professor]. Reviewed by I.N.Askalonov.
Nov. khir. arkh. no.9:86-89 S '61. (MIRA 14:10)

(ANATOMY, SURGICAL AND TOPOGRAPHICAL)
(SURGERY, OPERATIVE) (VOZNESKINSKII, V.P.) (IVANOV, V.A.)

L 16103-66 EWP(j)/EWI(m) RM/WW
ACC NR: AP6003250 (A)

SOURCE CODE: UR/0020/65/165/006/1323/1324

AUTHOR: Slonimskiy, G. L.; Korshak, V. V. (Corresponding member AN SSSR);
Vinogradova, S. V.; Kitaygorodskiy, A. I.; Askadskiy, A. A.; Salazkin, S. N.;
Belavtseva, Ye. M. 51
53

ORG: Institute of Hetero-organic Compounds, Academy of Sciences, SSSR (Institute
elementoorganicheskikh soedineniy Akademii nauk SSSR) B

TITLE: Difference in supramolecular structures of amorphous polyarylates obtained
by interfacial polycondensation and high-temperature polycondensation in homo-
geneous media 744/55

SOURCE: AN SSSR. Doklady, v. 165, no. 6, 1965, 1323-1324, and insert facing
p. 1324

TOPIC TAGS: polyaryl plastic, interfacial polycondensation, polycondensation,
polymer, impact strength, tensile strength

ABSTRACT: Electron-microscopic and mechanical studies were carried out on special-
ly synthesized types of F-7 polyarylates (products of polycondensation of tereph-
thaloyl chloride with phenolphthalein anilide). The results fully confirmed the
hypothesis that in interfacial polycondensation, when the polymer is formed at the
interface of two liquid phases in which it is insoluble, the supramolecular
Card 1/2 2

UDC: 541.64

L 16103-66

ACC NR: AP6003250

2
structure should be globular, whereas in homogeneous polycondensation in a solvent medium, the structure of the polymer is predominantly fibrillar. The mechanical properties were consistent with these observations: polyarylate F-7¹⁵ prepared by polycondensation in a homogeneous medium, had a greater impact and tensile strength and higher softening point than polyarylate F-7-M, synthesized by interfacial polycondensation. This fact is particularly notable, since it shows that an amorphous polymer of the same chemical structure can have different softening points depending upon the supramolecular structure. Orig. art. has: 1 table.

SUB CODE: \, 07/ SUEM DATE: 14Jul65 / ORIG REF: 004

CA

ASKALONOV, S. P.

12

Pasteurization of brucellosis milk. S. P. Askalonov
and P. A. Faltishenko. *Gigiena i Sanit.* 1930, No. 1, 18.
- Pasteurization at 70° for 30 min. suffices to reduce the
viable *Brucella* population to zero. At 65° a considerable
proportion remains viable. G. M. Kozolapoff

ASKALONOV, S. P.; NISHCHA, S. Ya.; SHTEYNBERG, T. A.

"The Use of Acidophylus Milk for Dysentery in Children," Pediatrics,
Akusherstvo i Ginekologiya (Pediatrics, Obstetrics, and Gynecology), Vol. 2, 1952, p 16.

ASKALONOV, Sergey Pavlovich

[Microbiological analysis and sanitary inspection of food products]
Mikrobiologicheskoe issledovanie i sanitarnaia ekspertiza pishche-
vykh produktov. Kiev, Gos. med. izd-vo USSR, 1955. 292 p.
(Food adulteration and inspection) (MLRA 8:9)

ASKALONOV, S.P.; DOBRIYER, I.R.; SHVAYKO, V.A. [deceased] (Kiyev)

Changes in the intestinal microflora in various diets [with summary
in English]. Vop.pit. 16 no.2: 58-62 Mr-Apr '57. (MLW 10:10)

1. Iz mikrobiologicheskoy laboratorii (zav. - kandidat meditsinskikh
 nauk S.P.Askalonov) Ukrain'skogo nauchno-issledovatel'skogo instituta
 piteniya, Kiyev.

(INTESTINES, microbiol.
 eff. of various diets in rats (Rus))

(DIETS, eff.
 on intestinal flora in rats (Rus))